Application No. 10/657,707 (Ilea et al.)

Claim 24 (unamended):

24. A device for releasing a latch comprising:

a housing;

an electric motor mounted in the housing:

a worm operatively coupled to the motor for driving rotation of the worm about an axis in a first rotational direction;

a worm gear, in meshing engagement with the worm, and being mounted in the housing for rotation about an axis substantially orthogonal to the worm axis;

a camshaft mounted on the worm gear and having a rotation axis coincident with the gear axis, the camshaft having a distal end extending to the exterior of the housing;

a cam affixed at the exterior end of the camshaft, having a surface for engaging the latch to move the latch from a closed position to a release position as the gear rotates in a first direction from a first position to a second position under control of the motor; and

a spring connected between the gear and the housing so as to bias the worm gear against rotation from the first position to the second position and such that energy is transferred from the motor to the spring as the gear rotates from said first position to said second position under control of the motor and, when the motor is powered down, the energy stored in the spring causes the gear to rotate in a second direction, opposite to the first direction, from the second position to the first position.

Remarks

- Examiner cited cam surface 15 of Nelsen against the claim, but cam 15 does not functionally correspond with the cam surface of Claim 24.
- Also, the Nelson cam 15 is not affixed to the distal exterior end of the housing as required by Claim 24. It would be impracticable to do this in the Nelson design because of the huge groove (18) in which cylindrical pin (13) floats.